

IN THE CLAIMS:

Please cancel Claims 3, 7 and 8 without prejudice or disclaimer of subject matter. Please amend the remaining claims as follows:

1. (Currently Amended) A modulation light source comprising:

a DBR laser ~~having which outputs a fundamental light, and which includes~~
a DBR part, a phase part and a gain part;

a light wavelength conversion device characterized by a phase matching wavelength, wherein said wavelength conversion device is arranged to receive the fundamental light output by said DBR laser, and wherein said wavelength conversion device outputs a second harmonic light in response to receipt of light whose wavelength is substantially near the phase matching wavelength and outputs substantially no second harmonic light in response to receipt of light whose wavelength is deviated substantially from the phase matching wavelength; and

a controller ~~control means,~~

wherein the ~~control means functions for controlling at least one of controller~~
provides a prescribed current to the gain part and the phase part, respectively and provides a current to the DBR part and the phase part for modulation using a current-based on a PWM signal in which pulse width is modulated corresponding to an image signal, thereby modulating a wavelength of the fundamental light to deviate from the phase matching wavelength of said light wavelength conversion device and the gain part is a part to which a substantially constant current is supplied.

2. (Currently Amended) ~~A~~ The modulation light source according to claim 1, ~~for an image display comprising:~~

a DBR laser which outputs a fundamental light, and which includes a DBR part, a phase part and a gain part;

a light wavelength conversion device characterized by a phase matching wavelength, wherein said wavelength conversion device is arranged to receive the fundamental light output by said DBR laser, and wherein said wavelength conversion device outputs a second harmonic light in response to receipt of light whose wavelength is substantially near the phase matching wavelength and outputs substantially no second harmonic light in response to receipt of light whose wavelength is deviated substantially from the phase matching wavelength; and

a controller;

wherein the controller provides a prescribed current to the gain part and the phase part, respectively and provides a current to the DBR part based on a PWM signal in which pulse width is modulated corresponding to an image signal, thereby modulating a wavelength of the fundamental light to deviate from the phase matching wavelength of said light wavelength conversion device, whereby the light wavelength conversion device outputs a second harmonic light corresponding to the image signal

~~wherein the control means functions for controlling the DBR part for modulation using the current based on the PWM signal and the phase part is a part to which the substantially constant current is supplied.~~

3. (Cancelled)

4. (Original) An image display apparatus comprising:
the modulation light source according to claim 1; and
a light deflector.

5. (Original) An electrophotographic process image display apparatus
comprising:
the modulation light source according to claim 1;
a light deflector; and
a photosensitive member.

6. (Currently Amended) A method of driving a modulation light source,
wherein said modulation light source comprises comprising a DBR laser which outputs a
fundamental light and which includes having a DBR part, a phase part and a gain part, and
further comprises a light wavelength conversion device, and control means, characterized
by a phase matching wavelength, wherein said wavelength conversion device is arranged to
receive the fundamental light output by said DBR laser, and wherein said wavelength
conversion device outputs a second harmonic light in response to receipt of light whose
wavelength is substantially near the phase matching wavelength and outputs substantially
no second harmonic light in response to receipt of light whose wavelength is deviated
substantially from the phase matching wavelength;

wherein said method comprises the steps of:

providing a prescribed current to the gain part and the phase part,

respectively; and

providing a current to the DBR part based on a PWM signal in which pulse

width is modulated corresponding to an image signal, thereby modulating a wavelength of

the fundamental light to deviate from the phase matching wavelength of said light

wavelength conversion device comprising the steps of:

~~controlling at least one of the DBR part and the phase part for modulation~~

~~using a current based on a PWM signal by the control means; and~~

~~supplying a substantially constant current to the gain part.~~

7. and 8. (Cancelled)

Please add Claims 9 and 14, as follows:

9. (New) A modulating light source, comprising:

a DBR laser which outputs a fundamental light, and which includes a DBR part, a phase part and a gain part;

a light wavelength conversion device characterized by a phase matching wavelength, wherein said wavelength conversion device is arranged to receive the fundamental light output by said DBR laser, and wherein said wavelength conversion device outputs a second harmonic light in response to receipt of light whose wavelength is

substantially near the phase matching wavelength and outputs substantially no second harmonic light in response to receipt of light whose wavelength is deviated substantially from the phase matching wavelength; and

a controller,

wherein the controller controls a current provided to at least one of the DBR part and the phase part based on a PWM signal, thereby modulating a wavelength of the fundamental light such that the wavelength of the fundamental light is deviated from the phase matching wavelength of said light wavelength conversion device, whereby the second harmonic light is modulated.

10. (New) The modulated light source according to claim 9, wherein the controller controls a current provided to the DBR part based on the PWM signal, and provides a prescribed current to the gain part and the phase part, respectively.

11. (New) The modulation light source according to claim 1, wherein the prescribed current to the phase part is a current that is constant for a time period longer than that corresponding to a maximal pulse width of the PWM signal.

12. (New) The modulation light source according to claim 2, wherein the prescribed current to the phase part is a current that is constant for a time period longer than that corresponding to a maximal pulse width of the PWM signal.

13. (New) The method according to claim 6, wherein the prescribed current to the phase part is a current that is constant for a time period longer than that corresponding to a maximal pulse width of the PWM signal.

14. (New) The modulation light source according to claim 10, wherein the prescribed current to the phase part is a current that is constant for a time period longer than that corresponding to a maximal pulse width of the PWM signal.